INTERNATIONAL SEARCH REPORT

international application No. PCT/CA2005/000097

A. CLASSIFICATION OF SUBJECT MATTER C23C-08/24

According to International Patent Classification (IPC) or to both national classification and IPC7

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) C23C-08/24; C23C-08/36; C22F-01/00; C22F-01/02; C22F-01/11.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used) QUESTEL-ORBIT; DELPHION (incl. Derwent); ESPACENET; WEST; CPD.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
Y	US 5208412 (SHETTY, H.R et al.), 3 May 1994 (03-05-1994) abstract; col. 2, lines 21-34; 56-61; col. 7, lines 19-26.	1-35
Y	Tek Z. et al. "Comparison of the mechanical properties of nitrogen ion implantation and micro-pulsed plasma nitriding techniques of Cr-Ni alloy", Surface and Coatings Technology, vol.158-159, pp.157-163, 1 September 2002 (01-09-1992).	1-35
Y	Alves C. et al. "The effect of pulse width on the microstructure of d.cplasma-nitrided layers", Surface and Coatings Technology, vol.122, no.2-3, pp.112-117, 15 December 1999 (15-12-1999).	1-35
Y	Blawert C. et al. "Surface treatment of nitriding steel 34CrAINi7: a comparison between pulsed plasma nitriding and plasma immersion ion implantation, Surface and Coatings Technology, vol.98, no.1-3, pp. 1181-1186, January 1998 (01-1998).	1-35
Y	Kim Y.S. et al. "Plasma diffusion treatment of stellite", Surface and Coatings Technology, vol.74-75, no.1-3, pp.425-430, 1 September 1995	1-35

Further documents are listed in the continuation of Box C. Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "B" earlier application or patent but published on or after the international [X] See patent family annex. "I" later document published after the date and not in conflict with the applies the principle or theory underlying to the principle or theory underlying to considered novel or cannot be considered nov			
Special categories of cited documents: "I" later document published after the idate and not in conflict with the agri- decument defining the general state of the art which is not considered to be of particular relevance "X" document of particular relevance; document of particular relevance; "Considered provider of particular relevance considered in the principle or theory underlying the considered provider of particular relevance."			
filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "&" document member of the same pat	nne claimed invention cannot be step when the document is uch documents, such combination the art		
Date of the actual complement of the	Date of mailing of the international search report 02 June 2005 (02-06-2005)		
Name and mailing address of the ISA/CA Canadian Intellectual Property Office Place du Portage I, C114 - 1st Floor, Box PCT 50 Victoria Street Gatineau, Quebec K1A 0C9 Facsimile No.: 001(819)953-2476	319) 953-0765		

INTERNATIONAL SEARCH REPORT

Information on patent family members

ternational application No. PCT/CA2005/000097

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US5308412	03-05-1994	none	